

CLAIMS

WHAT IS CLAIMED IS:

1. A method of interleaving video data, comprising:
 - placing first pixel values from a first field of video data into alternating rows of pixels in a video frame; and
 - augmenting the video frame in the remaining rows with replacement pixel values determined from the first pixel values and second pixel values from a second field of video data.

2. The method of claim 1, wherein augmenting the video frame comprises:
 - interpolating from the first pixel values in the video frame to provide interpolated pixel values in rows of pixels between the alternating rows of pixels with the first pixel values;
 - selecting a sub-block of pixels centered on a current pixel;
 - determining a set of filter values from spatially filtering the sub-block of pixels with a set of spatial filters;
 - determining video values based on the set of filter values; and
 - determining a replacement pixel value for the interpolated pixel value based on the video values and a second pixel value from a second field of video data.

3. The method of claim 2, wherein interpolating from the first pixel values comprises averaging the first pixel value from an immediately preceding row and one from an immediately following row to determine the interpolated pixel value.

4. The method of claim 2, wherein determining the set of filter values includes taking a products of a set of spatial filter arrays and the sub-block of pixel values to form the set of filter values.

5. The method of claim 4, wherein determining video values comprises:
 - determining an optimum filter value from the set of filter values;
 - calculating a set of video values from the sub-block of pixel values in a fashion determined by the optimum filter value.